NEVADA DIVISION OF ENVIRONMENTAL PROTECTION

F A C T S H E E T
(pursuant to NAC 445A.236)

Permittee Name: National Park Service - Boulder Beach WWTP
Lake Mead National Recreation Area

Permit Number: NEV50011

Description of Discharge

Location: The Boulder Beach wastewater treatment facility is located west of Lakeshore Drive and Lake Mead Marina (Boulder Harbor), approximately 6 miles south of Las Vegas Bay in the Lake Mead National Recreation Area in T. 22 S., R. 64 E., Sections 9, and 16MDB&M; Latitude: 36° 03' 07"N.; Longitude: 114° 49' 24"W..

Characteristics: Sanitary wastes from residential, commercial and recreational facilities are collected in a system of force mains and collection systems, then pumped via six lift stations to the wastewater treatment facilities. The treatment plant serves Hemenway Beach area, the special events beach, and the Boulder Beach recreation areas. The wastewater treatment plant facultative lagoons are designed to treat domestic sewage in compliance with secondary treatment standards. Wastewater influent generated in the service area is discharged into an aerated 1.27 acre asphalt lined and sealed primary oxidation pond for treatment. A second non-aerated 1.13 acre asphalt lined, secondary pond provides additional capacity for treatment. A third, 2.07 acre soil lined settling and evaporation pond is in series with a 1.8 acre percolation/evaporation pond. No effluent discharge to surface waters is allowed.

Flow: The facility designed to treat a volume of domestic sewage with an influent flow of 0.040 MGD for a 30-day average and 0.130 MGD for a daily maximum. Flow is monitored continuously.

Effluent Limitations: Outfall 001: distribution box manhole
Outfall 002: discharge of secondary pond

FLOW: 0.040 MGD 30-day average
0.130 MGD daily maximum

pH: between 6.0 & 9.0 Standard Units Outfall 002

BOD_5: no limits at Outfall 001
30 mg/l 30-day ave. at Outfall 002
45 mg/l daily max. at Outfall 002
TSS: no limits at Outfall 001
90 mg/l daily max. at Outfall 002

D.O.: no limits, Monitor & Report Outfall 002

General: The Boulder Beach wastewater treatment facility(BBWWTF) serves NPS staff housing and maintenance shops, the concessioner housing, a campground, picnic areas, a trailer village, fish cleaning station, restrooms, dump station, motel, restaurant, store, and marina facilities with boat pump outs for recreational watercraft and the Desert Princess located in the greater Boulder Beach/Horsepower Cove recreation areas. The BBWWT facilities consist of a collection system, force mains, six NPS lift stations, concessioner collection systems, lift stations, and force mains, and the treatment lagoons.

System upgrades completed during the past permit period include the following: four new lift stations, numerous gravity main repairs and manhole rehabilitations, relining of the primary and secondary facultative treatment ponds(asphalt), installation of new aerators in the primary pond, new controls, valving and connection piping between the ponds, and a pre-treatment vault which has been installed for high-strength vault toilet wastes. A downgradient groundwater monitoring well will be required to be installed east of and below the treatment lagoons.

The applicant has applied for a renewal of the discharge permit. The treatment plant lagoons are operated in series, with disposal by evaporation/percolation. The system is connected with piping and valves so that it may be operated in parallel, and or a pond may be bypassed for repair and maintenance if needed.

Receiving Water Characteristics: The effluent is disposed to groundwater through the soils beneath the percolation lagoons. Shallow groundwater in the Boulder Beach area is typical of shallow desert aquifers, with elevated mineral (TDS) concentrations. A monitoring well will be required to be located adjacent to (downgradient from) the disposal lagoons to monitor groundwater quality to determine if any adverse effects are detected in the groundwater. No discharge to surface waters is allowed.

Procedures for Public Comment:

The Notice of the Division's intent to issue a permit authorizing the facility to discharge to the groundwater of the State of Nevada subject to the conditions contained within the permit, is being sent to the **Las Vegas Review Journal** and **Boulder City News** for publication. The notice is being mailed to interested persons on our mailing list. Anyone wishing to comment on the proposed permit can do so in writing for a period of 30 days following the date of publication of the public notice. The comment period can be extended at the discretion of the Administrator.

A public hearing on the proposed determination can be requested by the applicant, any affected State, any affected interstate agency, the Regional Administrator or any interested agency, person or group of persons.

The request must be filed within the comment period and must indicate the interest of the person filing the request and the reasons why a hearing is warranted.

Any public hearing determined by the Administrator to be held must be conducted in the

geographical area of the proposed discharge or any other area the Administrator determined to be appropriate. All public hearings must be conducted to accordance with NAC 445A.238.

The final determination of the Administrator may be appealed to the State Environmental Commission pursuant to NRS 445A.605.

Proposed Determination

The Division has made the tentative determination to reissue the proposed permit for a period of five (5) years.

Monitoring Well Sampling Requirements - MW-1

PARAMETERS		Frequency
TOTAL DISSOLVED SOLIDS:	Monitor and Report	Quarterly
NITRATE as N:	See Part I.A.15	Quarterly
TOTAL NITROGEN as N:	10 mg/l	Quarterly
CHLORIDE:	Monitor and Report	Quarterly
GROUNDWATER ELEVATION:	Monitor and Report	4th Quarter
DEPTH TO GROUNDWATER:	Monitor and Report*	Quarterly

* If dry, report as “Dry”.

Rationale for Permit Requirements

Monitoring is required to assess the level of treatment being provided and to ensure that groundwater quality is not degraded.

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